MAY 12 1994

CH2M HILL

TECHNICAL STATUS REPORT

PREPARED FOR: Tom Post/EPA Region 10

DATE: May 10, 1995

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CH2M HILL

TECHNICAL STATUS REPORT

PREPARED FOR: Tom Post/EPA Region 10

COPIES TO: Byung Maeng/Ecology

PREPARED BY: Liz Luecker/CH2M HILL

DATE: May 10, 1995

SUBJECT: Rhône-Poulenc Monthly Status Report

SITE NAME AND LOCATION: Rhône-Poulenc Inc./Seattle Plant
Tukwila, WA

REPORTING PERIOD: April 1 through April 30, 1995

PROJECT: NPE35051.P1

Following is CH2M HILL's technical status report summary for the RCRA Corrective Action Project at Rhône-Poulenc's (RPI) Seattle Plant. This status report summarizes activities implemented and planned for this Corrective Action project and is intended to be transmitted to U.S. EPA Region 10 in fulfillment of the monthly progress reports required in Consent Order No. 1091-11-20-3008(h).

Progress Made This Reporting Period

Task P1-Project Management

Edwin Liu/RPI, Sue Hays/Hays Consulting, and Liz Luecker/CH2M HILL met with Teresa Michelsen/Ecology NWRO, Byung Maeng/Ecology NWRO, and Tom Post/EPA 10 at Ecology's Northwest Regional Office on April 27, 1995 to discuss Ecology's sediment comments on the Draft RFI Report and the request for additional sediment sampling.

Task A2-Applicable Regulations and Permits

Storm Water Permitting.

On April 24, Buzz Rahier/RPI received the NPDES Permit for Construction for the drainage modifications and grading.

The sediments in the storm sewers (both those that will be re-activated and those that may have discharged to the sediments in the past) will be tested; such sampling has also now been requested by T. Michelsen/Ecology.

On April 10, Buzz Rahier/RPI sent a letter to Calvin Haggard/King County International Airport requesting a meeting to discuss the proposed drainage plan. On April 13, Sue Hays/Hays Consulting met with Jeff Winter/King County International Airport to present a letter and site plan describing RPI's drainage plans for the eastern portion of the facility. The drawing showed the planned catch basins and coalescing vault which would discharge to the County's Slip 6 storm drain. Jeff indicated that there was no problem with this and RPI would receive a letter of approval. In this letter, King County also intends to request some changes in the easement language for the storm drain across RPI's property.

Task A3-Interim Measures

Vanillin Building Demolition

Fish toxicity testing was performed by Lauck's Laboratories on a sample of green, copper-containing residue collected from the surface of discolored concrete and discolored soil of the Vanillin Building foundation. Based on these test results, the discolored material was classified as a Washington State Extremely Hazardous Waste. The discolored material will be separated from the remaining debris and will be landfilled at Chemical Waste Management's facility in Arlington, Oregon.

PCB-Contaminated Compressor Pad.

The PCB-contaminated compressor pad and soil were removed from the ground during March by CEcon Corporation. The excavation was completed on March 29. Terra Nova Associates performed the sampling documenting removal using enzymatic test kits with laboratory confirmation. Part of the material (soils and concrete) was hauled to APTUS for incineration on March 31 and part the week of April 3. A total of seven loads were incinerated at the Aptus facility in Utah. A 10'x12'x2' concrete footing beneath the compressor pad was sampled and found to contain less than 21 ppm PCBs. On April 20, one load of this PCB-contaminated concrete was landfilled at Chemical Waste Management's facility in Arlington, Oregon. All of the soil and concrete from this excavation have been properly disposed of. The excavation hole was filled with sand from the cooling tower sump (prior to demolition of the sump).

Water collected during the excavation is being stored in a rented tank while awaiting disposal. The water contains 420 ppb PCBs. Various filter media, such as activated carbon and a combination of activated carbon and polymer, are currently being evaluated for their effectiveness in reducing the PCB concentration in the water to less than 5 ppb. The filter media and recovered sediment would be incinerated, and the water would be discharged to METRO if it contains <5 ppb PCBs and meets the routine METRO discharge requirements for toluene, chromium, and copper.

LNAPL.

As in March, Buzz Rahier/RPI detected LNAPL in both H10 and MW18. He has removed free product from H10. Buzz is monitoring wells H10 and MW18 once to three times per

week, depending on his workload. The remaining wells were monitored monthly as they have been in the past; this month, the well monitoring occurred over 2 days: April 27 and 28. During April, the amount of LNAPL measured in H10 ranged from 0.042 to 1.125 feet; the amount of LNAPL measured in MW18 ranged from 0.063 to 0.54 feet. The remaining wells surveyed did not contain LNAPL beyond a film or sheen. Information on the LNAPL thicknesses is attached.

Task A5-RFI Implementation

Seeps were sampled on April 18, 19 and 20 during a greater than 1' minus tide. Seven seeps were sampled: three were located along the bank of Slip 6, and 4 were located between the RPI Duwamish Waterway pier and Slip 6. One of the four seeps into the Duwamish Waterway was dark; a duplicate sample was collected from this seep. Both the sample and the duplicate from the dark seep were analyzed for 40 CFR 264 Appendix IX, as discussed in the RFI Workplan.

Chromium speciation was performed using a chelation method described in SW-846, EPA Method 7197. As previously discussed, Method 7197 and an ion chromatography method, EPA Method 218.6 were previously used for groundwater analyses. The method detection limit for chromium VI using EPA Method 7197 was 8 ppb, which was established using EPA procedures discussed in 40 CFR 136 Appendix B; these procedures call for a seven point calibration. The method detection limit using EPA Method 218.6 was 5 ppb; however, this detection limit was established using a less rigorous approach. Therefore, Method 7197 was used for the seep analyses. Preliminary results indicate that all chromium present is found in the trivalent state; no detectable levels of chromium VI were found in the seeps.

Seep analyses were expanded from that in the RFI Workplan to include analysis of the seeps for guaiacol and resin acids, as requested by T. Michelsen/Ecology in her RFI comments. Sampling was also been expanded to include surface water up and down river from the facility; these surface water samples were analyzed for chromium VI, using EPA Method 7197. According to preliminary data sent to CH2M HILL by S-Cubed on April 26, no chromium VI was detected.

Task A8-Revised RFI Report

Work progressed on preparing a response to EPA and Ecology comments on the Draft RFI Report.

Task R1-Risk Assessment/proposed Media Cleanup Standards Report

On Friday 4/14, Tom Post/EPA 10 left a voice mail commenting on the Risk Assessment/Media Cleanup Standards (RA/MCS) report outline; this was transcribed and forwarded to the Risk Assessment team and Edwin Liu/RPI on Monday 4/17. The comments indicated that EPA wanted to include a residential exposure scenario. The Risk Assessment team is opposed to such a scenario because it is unrealistic for the site; this needs to be discussed with EPA.

According to current plans, the pathways to be quantitatively evaluated are vapor inhalation and particulate inhalation of contaminants volatilizing from soil and from

groundwater through soil, and incidental ingestion of soil by potential future onsite workers. Other scenarios would be qualitatively addressed, as appropriate. A residential scenario is not included because: 1) current land use, zoning, and future plans by Tukwila all state that this area is heavy industrial; 2) The nearest residential area is 0.5 miles east/west and 1.0 miles north/south; 3) prevailing winds are north/south; 4) groundwater is not used for drinking water; 4) the Duwamish (surface water) flows through industrial areas. The potential exposure pathways need to be discussed and agreed to by EPA so that work on the RA/MCS report will not need to be re-prepared when the EPA project manager changes; these discussions need to take place with the individual who will be the EPA project manager when the RA/MCS report is submitted. Work on the RA/MCS report cannot go foreward until EPA and RPI agree to the pathways that will be evaluated.

Other Risk Assessment issues that EPA and the RPI risk assessment team need to discuss are how the intermedia transfer of contaminants will be addressed in the RA/MCS report. Can the 100x rule under MTCA be used for the RA/MCS report rather than modeling contaminant leaching from soil to groundwater (MTCA allows the use of 100x rule for Method C, WAC 173-340-745[4])? Any additional evaluation (e.g. leach tests) of leaching of contaminants from soil to groundwater would be evaluated in CMS. However, it is not realistic to assume that contaminants go from soil to groundwater to surface water without attenuation; guidelines should be outlined so that information developed in the CMS could be incorporated and change the media cleanup standards issued by EPA, if necessary.

According to current plans, sediment concentrations will be compared to the Sediment Management Standards (WAC 173-204), rather than developing separate risk-based numbers.

Deliverables Submitted

The March Progress Report was submitted to U.S. EPA on April 10, 1995.

Progress Planned For Next Reporting Period

Task P1-Project Management

Edwin Liu/RPI, Paul Nemanic/RPI,Doug Holsten/CH2M HILL, and Liz Luecker/CH2M HILL will meet with Tom Post/EPA 10, Rene Fuentes/EPA 10, Byung Maeng/Ecology NWRO at Bogle and Gates' Seattle Office on May 10, 1995 to discuss EPA's and Ecology's comments on the Draft RFI Report and RPI's response to these comments.

Task A3-Interim Measures

Continue to monitor LNAPL thicknesses in monitoring wells.

Discolored concrete and discolored soil from the Vanillin Building foundation will be separated from the remaining debris and will be landfilled at Chemical Waste Management's facility in Arlington, Oregon during May.

Options for disposal of the PCB-contaminated water will be evaluated, and the water will be disposed of.

Task A5-RFI Implementation

Analytical results from the Round 3 groundwater sampling and the seep sampling are expected by mid-May. CH2M HILL will start validating the data when the data arrive.

The sediments in the storm sewers (both those that will be re-activated and those that may have discharged to the sediments in the past) will be tested; such sampling has also been requested by T. Michelsen/Ecology. Samples will be taken from accessible manholes and catch basins where sediment is present. These samples will be analyzed for semivolatile organics, metals, PCBs, toluene, total organic carbon, pH, grain size, and specific gravity, in accordance with QA/QC procedures in the RFI Workplan.

Task A8-Revised RFI Report

The response to agency comments on the Draft RFI Report will be submitted to EPA and Ecology on May 5.

rhône-p/MSR4-95.EPA

RHONE POULENC - MARGINAL WAY FACILITY
MONTHLY LNAPL SURVEY LOG
Floating Product Layer Thickness in Feet

MW	6/7/94	6/8/94	6/17/94	8/4/94	9/8/94	10/6/94	11/3/94	12/5/94	1/11/95	2/17/95	3/23/95	3/27/95	3/28/95	4/27/95	4/28/95
H10	0	0	Film	Film	Film	0	0	0	0.26 [3]	2.01	0.01	1.6		0.063	
H1			0	Sheen	0	0	0	0	Sheen [4]	0		0		0	
MW12	0	0	0.007 [1]	Sheen	Film	Film	0.005	0	Sheen [4]	0.16		Sheen		Film [9]	
H11			0	Film	0.01	0.01	0.005	Film	0.04 [3]	Sheen [4]		0		0	
DM7			0	0	0	0	0	0	0	0		0			0
H9			0	0	Sheen	0	0	0	0	0		0		0	
H6			0	0	Sheen	0	0	0	0	0		0			0
DM2A			0	0	0	0	0	0	0	0		0			0
DM2B			0	0	0	0	0	0	0	0		0			0
DM8			0	0	0	0	0	0	0	0		0		0	
A9			0	0	0	0	0	0	0	--- [5]	0			0	
DM3A			0	0	0	0	0	0	0	0	0			0	
DM3B			0	0	0	0	0	0	0	0	0			0	
A2			0	0	0	0	0	0	0	0	0			--- [7]	
A4			0	0	0	0	0	0	0	0	0 [7]			0	
DM4			0	0	0	0	0	0	0	0		0			0
B4			0	0	0	0	0	0	0	0		0		0	
B2			0	0	0	0	0	0	0	0		0		0	
DM5			0	0	0	0	0	0	0	0 [6]		0		0	
B1A			0	0	0	0	0	0	0	0	0			0	
B1B			0	0	0	0	0	0	0	0	0			0	
C1			0	0	0	0	0	0	0	0	0			0	
DM6			0	0	0	0	0	0	0	0		0		0	
B5			0	0	0	--- [2]	--- [2]	--- [2]	--- [2]	--- [2]			0	0	
G3			0	0	0	0	0	0	0	0		0		0	
G1			0	0	0	0	0	0	0	0		0		0	
B6			0	0	0	0	0	0	0	0		0		0	
MW13					0	0	0	0	0	0		0		0	
MW14					0	0	0	0	0	0		0		0	
MW15					0.021	Film	0.01	Film	0.01 [3]	0		Sheen			0
MW16					0.005	0	0	0	0	0		0			0
MW17					0	0	0	0	0	0		0		0	
MW18					0	0	0	0	0	Sheen [4]		Sheen		0.063 [9]	
MW19					0.01	0.021		0	Sheen [4]	Sheen [4]		Sheen		Sheen	
MW20					0	0	0	0	0	0		0		0	
DM1A											0				
DM1B											0				
E3											Sheen [7]				

[1] Removed product layer with bailer.

[2] Buried under rubble.

[3] Solinst Model 121 oil/water interface probe.

[4] Sheen noted when measurement device was placed in clean water.

[5] Casing cover/PVC pipe bent; well could not be accessed.

[6] No sheen noted when measurement device was placed in clean water, but water turned light brown after probing.

[7] Orange/rust colored residue on probe.

[8] Gobules.

[9] Dark Phase.

Note: Shaded areas reflect current LNAPL survey.

RHONE POULENC - MARGINAL WAY FACILITY
DAILY LNAPL SURVEY LOG
Floating Product Layer Thickness in Feet

MW	2/21/95	2/22/95	2/23/95	2/24/95	2/27/95	2/28/95	3/6/95	3/7/95	3/8/95	3/9/95	3/10/95	3/13/95	3/14/95	3/15/95	3/16/95	3/20/95	3/21/95	3/22/95	3/23/95	3/27/95	3/30/95	3/31/95	4/03/95	4/05/95	4/7/95	4/13/95	4/18/95	4/25/95	4/26/95	4/27/95	4/28/95
H10/am		0.01	0.01	0.02	1.04 [1]	0.79 [1]	0.61 [3]	0.85 [3]	0.67 [3]	0.56 [3]	0.22 [3]	0.01 [2]	Film	Film	0.01	0.18 [1]	0.01	0.70	0.01	1.58 [1]	1.23	1.08	0.667	0.667		0.333			0.198 [1]		
H10/pm	0.13	0.01		0.03 [3]	0.21 [1,3]		0.86 [3]	0.41 [1]		0.22 [3]	0.02	Film	Film	Sheen		0.02	0.11 [3]			1.60	1.40	1.46	1.125	0.667	0.563		0.333	0.292 [1]		0.063	0.042
H1										0	0			0	0		Sheen		0												
MW12										0.07 [3]	Sheen			Sheen [2]	Sheen		Film		0												
H11										0	0			0	0		Sheen		0												
H9										0	0			0	0		Sheen		0												
H6										0	0			0	0		Sheen		0												
MW15										0	0			Sheen [2]	0		0			0											
MW16										0	0			0	0		Sheen			0											
MW18/am										0					0								0.52	0.54		0.42			0.31		
MW18/pm											0			0			0			Sheen		0.87	0.52	0.4	0.13		0.29	0.32		0.063	0.29
MW19										0	Sheen			0 [2]	0		Sheen			Sheen											

[1] Removed product layer with bailer.

[2] Floating crud layer.

[3] Solinst Model 121 oil/water interface probe.

LNAPL.XLS